

Call a permutation of the numbers  $1, 2, 3, \dots, n$  *stable* if it starts with a 1 and its consecutive terms differ by at most 2. Let  $T_n$  be the number of stable permutations. If  $1 \leq n \leq 2020$ , for how many values of  $n$  is  $T_n$  divisible by 3?